		Acute Non-	Chronic Non	
Chemical Name	CAS#	Carcinogen	Carcinogen	Carcinogen
		Acute Non-	Chronic Non-	
1-Chloro-2,3-epoxypropane (Epichlorohydrin)	106-89-8	Carcinogen	Carcinogen	Carcinogen
		Acute Non-	Chronic Non-	
Chloroethane (Ethyl chloride)	75-00-3	Carcinogen	Carcinogen	
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	13010-47-4			Carcinogen
		Acute Non-		
Chloroform	67-66-3	Carcinogen		Carcinogen
		Acute Non-		
Chloromethane (Methyl chloride)	74-87-3	Carcinogen		
Chloromethyl methyl ether (CMME)	107-30-2			Carcinogen
		Acute Non-		•
1-Chloro-1-nitropropane	600-25-9	Carcinogen		
4-Chloro-o-phenylene diamine (4-Chloro-1,2-				
benzenediamine)	95-83-0			Carcinogen
		Acute Non-		
Chloropicrin (Trichloronitromethane)	76-06-2	Carcinogen		
		Acute Non-		
beta-Chloroprene	126-99-8	Carcinogen		Carcinogen
		Acute Non-		
o-Chlorostyrene	2039-87-4	Carcinogen		:
		Acute Non-		
o-Chlorotoluene	95-49-8	Carcinogen		
	·	Acute Non-		
Chlorpyrifos	2921-88-2	Carcinogen		
Chromium (metal) and compounds other than Chromium		Acute Non-		
(VI)	7440-47-3	Carcinogen	,	
Chromium (VI): Chromic acid mists and dissolved Cr (VI)			Chronic Non-	
aerosols, as Cr	7440-47-3		Carcinogen	Carcinogen
Chromium (VI): compounds and particulates	7440-47-3		Chronic Non-	Carcinogen
		Acute Non-		
Chromyl chloride, as Cr	14977-61-8	Carcinogen		Carcinogen
		Acute Non-		
Cobalt, elemental, and inorganic compounds, as Co	7440-48-4	Carcinogen		
Coke oven emissions				Carcinogen
		Acute Non-	·	
Copper and compounds, dusts and mists, as Cu	7440-50-8	Carcinogen		
- Copport and Composition		Acute Non-		
Copper and compounds, fume, as Cu	7440-50-8	Carcinogen		
p-Cresidine	120-71-8			Carcinogen
<i>p</i> 01000m0		Acute Non-		
Cresol (mixtures and isomers)	1319-77-3	Carcinogen		
Olesof (mixtures and isomers)		Acute Non-		
Crotonaldehyde	4170-30-3	Carcinogen		
Ciotoliadeliyae		Acute Non-		
Crufomate	299-86-5	Carcinogen		
Citionnate	1	Acute Non-		· ·
Cumono (Isanranyi hanzana)	98-82-8	Carcinogen		
Cumene (Isopropyl benzene)	10002	Acute Non-		
Our	420-04-2	Carcinogen		
Cyanamide	142U-U4-2	Acute Non-		
2 11 (1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	442 22 0	1 .		
Cyanides, (inorganics), as CN	143-33-9	Carcinogen		
_	400 40 5	Acute Non-		
Cyanogen	460-19-5	Carcinogen		

^{*} Note: Synonyms for some common chemicals are inlouded in this list, so there may be more than one listing for a chemical in this table 05/05/2004 Page 5 of 20



<i>,</i>		Acute Non-	Chronic Non	£
Chemical Name	CAS#	Carcinogen	Carcinogen	Carcinogen
		Acute Non-		
1,3-Dichloro-5,5-dimethyl hydantoin	118-52-5	Carcinogen		
		Acute Non-		
Dichlorodiphenyltrichloroethane (DDT)	50-29-3	Carcinogen		Carcinogen
		Acute Non-		
1,1-Dichloroethane (Ethylidene dichloride)	75-34-3	Carcinogen		
		Acute Non-		
1,2-Dichloroethane (Ethylene dichloride; EDC)	107-06-2	Carcinogen		Carcinogen
		Acute Non-		
Dichloroethyl ether (Bis(2-chloroethyl)ether)	111-44-4	Carcinogen		
		Acute Non-		
1,1-Dichloroethylene (Vinylidene chloride)	75-35-4	Carcinogen		
		Acute Non-		
1,2-Dichloroethylene	540-59-0	Carcinogen		
		Acute Non-		0
Dichloromethane (Methylene chloride)	75-09-2	Carcinogen		Carcinogen
		Acute Non-		
1,1-Dichloro-1-nitroethane	594-72-9	Carcinogen	<u> </u>	
		Acute Non-	Chronic Non-	9
1,2-Dichloropropane (Propylene dichloride)	78-87-5	Carcinogen	Carcinogen	
		Acute Non-	Chronic Non-	Ci
1,3-Dichloropropene	542-75-6	Carcinogen	Carcinogen	Carcinogen
		Acute Non-		
2,2-Dichloropropionic acid	75-99-0	Carcinogen	Chronic Non-	
	00 70 7	Acute Non-		
Dichlorvos	62-73-7	Carcinogen Acute Non-	Carcinogen	
	444 66 6			
Dicrotophos	141-66-2	Carcinogen Acute Non-		
	77 70 0		g i Vila doub	
Dicyclopentadiene	77-73-6	Carcinogen Acute Non-		1988 198
	60 57 4			114
Dieldrin	60-57-1	Carcinogen Acute Non-		
	444 40 0	Carcinogen	:	
Diethanolamine	111-42-2	Acute Non-	*	
Pot at a facility of	109-89-7	Carcinogen		
Diethylamine	109-09-7	Acute Non-		
O District and a sthematic	100-37-8	Carcinogen		
2-Diethylaminoethanol	100-37-0	Acute Non-		
Districture triangles	111-40-0	Carcinogen		
Diethylene triamine Diethyl hexyl phthalate (Bis(2-ethyl hexyl) phthalate; Di-sec-	111-40-0	Acute Non-		
	117-81-7	Carcinogen		
octyl phthalate; DEHP)	117-01-7	Acute Non-		
District shake hele	84-66-2	Carcinogen		
Diethyl phthalate	56-53-1			Carcinogen
Diethylstilbestrol (DES)	64-67-5			Carcinogen
Diethyl sulfate	1 07-01-0	Acute Non-		
1.4 Diothylana ayida /1.4 Dioyana)	123-91-1	Carcinogen		Carcinogen
1,4-Diethylene oxide (1,4-Dioxane)	75-37-6		Chronic Non-	
1,1-Difluoroethane	1,0-0,-0	Acute Non-	JIN JING 1101F	
Districted other (DOE)	2238-07-5	Carcinogen		
Diglycidyl ether (DGE)	101-90-6			Carcinogen
Diglycidyl resorcinol ether	117-10-2			Carcinogen
1,8-Dihydroxyanthroquinone (Danthron)	1117-10-2	1		Varcinogen

^{*} Note: Synonyms for some common chemicals are inlouded in this list, so there may be more than one listing for a chemical in this table 05/05/2004 Page 7 of 20

		Acute Non-	Chronic Non	
Chemical Name	CAS#	Carcinogen	Carcinogen	Carcinoge
GBE (2-Butoxyethanol; Ethylene glycol monobutyl ether;		Acute Non-	·	
utyl cellosolye)	111-76-2	Carcinogen		
GEE (2-Ethoxyethanol; Ethylene glycol monoethyl ether;		Acute Non-	Chronic Non-	
ellosolve)	110-80-5	Carcinogen	Carcinogen	
GEEA (2-Ethoxyethyl acetate; Ethylene glycol monoethyl		Acute Non-		
ther acetate; Cellosolve acetate)	111-15-9	Carcinogen		
	·	Acute Non-		
EGME (2-Methoxyethanol; MethylCellosolve)	109-86-4	Carcinogen		
GMEA (2-Methoxyethyl acetate; MethylCellosolve		Acute Non-		
acetate)	110-49-6	Carcinogen		
		Acute Non-		
Endosulfan Endosulfan	115-29-7	Carcinogen		
Lindosulian		Acute Non-		
Endrin Endrin	72-20-8	Carcinogen		
		Acute Non-	Chronic Non-	
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106-89-8	Carcinogen	Carcinogen	Carcinoger
-pichlorohydnii (1-chloroz,5-epexypropanio)	4 a 24 4 5	Acute Non-		•
	2104-64-5	Carcinogen		
EPN 1,2-Epoxybutane (1,2-Butylene oxide)	106-88-7		Chronic Non-	
	66733-21-9			Carcinoger
Erionite (Zeolites)	100100 = 1 0	Acute Non-		
Title / f the demain o	75-04-7	Carcinogen		
Ethanamine (Ethylamine)		Acute Non-		
	141-43-5	Carcinogen		
Ethanolamine	141-400	Acute Non-		
<u></u>	563-12-2	Carcinogen		
Ethion EGEE:	JUU-12-2	Acute Non-	Chronic Non-	
2-Ethoxyethanol (Ethylene glycol monoethyl ether; EGEE;	110-80-5	Carcinogen	Carcinogen	
cellosolve)	110-00-3	Acute Non-	- Caroniogon	
2-Ethoxyethyl acetate (Ethylene glycol monoethyl ether	111-15-9	Carcinogen		
acetate; EGEEA; cellosolve acetate)	1 111112-2	Acute Non-		
	140-88-5	Carcinogen		
Ethyl acrylate	140-00-0	Acute Non-		
	75-04-7	Carcinogen	,	
Ethylamine (Ethanamine)	1/3-04-/	Acute Non-		
	E44 0E E	Carcinogen		
Ethyl amyl ketone	541-85-5	Acute Non-	Chronic Non-	
			Carcinogen	
Ethyl benzene	100-41-4	Carcinogen	Carcinogen	
		Acute Non-		
Ethyl bromide	74-96-4	Carcinogen		
		Acute Non-		
Ethyl tert-butyl ether (ETBE)	637-92-3	Carcinogen		
		Acute Non-		
Ethyl butyl ketone	106-35-4	Carcinogen	:	
Ethyl carbamate (Urethane)	51-79-6		<u> </u>	Carcinoge
		Acute Non-	Chronic Non-	
Ethyl chloride (Chloroethane)	75-00-3	Carcinogen	Carcinogen	
	1	Acute Non-		
Ethyl cyanoacrylate	7085-85-0	Carcinogen		
7		Acute Non-		
Ethylene chlorohydrin	107-07-3	Carcinogen		
Largono onoronyani.		Acute Non-		
Ethylenediamine	107-15-3	Carcinogen		
Ethylene dibromide (EDB; 1,2-Dibromoethane)	106-93-4		1	Carcinoge

a chemical in this table 05/05/2004

Ot waste at Manage	CAS#	Acute Non- Carcinogen	Chronic Non Carcinogen	Carcinoger
Chemical Name	VAO #	Acute Non-		3
and the state of t	76-44-8	Carcinogen		
leptachlor and heptachlor epoxide	70-44-0	Acute Non-		
•	440.74.4	Carcinogen		Carcinogen
lexachlorobenzene (HCB)	118-74-1			Carcinogen
		Acute Non-		
lexachlorobutadiene	87-68-3	Carcinogen		
lexachlorocyclohexane and isomers (Lindane and		Acute Non-		
somers)	58-89-9	Carcinogen		Carcinoger
		Acute Non-		
lexachlorocyclopentadiene	77-47-4	Carcinogen		
ickaginorocyologomacaiono		Acute Non-		
-lexachloroethane	67-72-1	Carcinogen		Carcinoger
1exachioroetriane		Acute Non-		
	1335-87-1	Carcinogen		
Hexachloronaphthalene	680-31-9			Carcinoger
lexamethyl phosphoramide	000-01-0	Acute Non-	Chronic Non-	
	922.06.0	Carcinogen	Carcinogen	
Hexamethylene-1,6-diisocyanate (HDI)	822-06-0	Acute Non-	Chronic Non-	
n-Hexane	110-54-3	Carcinogen	Carcinogen	
		Acute Non-		
1,6- Hexanediamine	124-09-4	Carcinogen		
		Acute Non-		
1-Hexene	592-41-6	Carcinogen		
1-1 reaction		Acute Non-		
Hexone (Methyl isobutyl ketone; MIBK)	108-10-1	Carcinogen		
Hexone (Methyl Isobutyl Retoric, Milory		Acute Non-		
A. A	108-84-9	Carcinogen		
sec-Hexyl acetate	100010	Acute Non-		
	107-41-5	Carcinogen		
Hexylene glycol	10/-41-0	Acute Non-		
	000 04 0	Carcinogen		Carcinoger
Hydrazine and hydrazine sulfate	302-01-2	Acute Non-	Chronic Non-	<u> </u>
		£	1 "	
Hydrochloric acid (Hydrogen chloride; Muriatic acid)	7647-01-0	Carcinogen	Carcinogen	<u> </u>
		Acute Non-		
Hydrogenated terphenyls	61788-32-7	Carcinogen		<u> </u>
		Acute Non-		
Hydrogen bromide	10035-10-6	Carcinogen		
i iyalogoli bidindo		Acute Non-	Chronic Non-	•
Hydrogen chloride (Hydrochloric acid; Muriatic acid)	7647-01-0	Carcinogen	Carcinogen	<u> </u>
ryurogen chionae (riyarochione acia, manata acia)		Acute Non-		
	74-90-8	Carcinogen	1	
Hydrogen cyanide	14-00-0	Acute Non-		
	7664 20 2	Carcinogen		
Hydrogen fluoride (Hydrofluoric acid)	7664-39-3	Acute Non-	-	
		i		
Hydrogen peroxide	7722-84-1	Carcinogen	<u> </u>	
	1	Acute Non-		
Hydrogen sulfide	7783-06-4	Carcinogen		
		Acute Non-		
Hydroquinone	123-31-9	Carcinogen		
i i i i i i i i i i i i i i i i i i i		Acute Non-		
lo 11 december 1	999-61-1	Carcinogen		
2-Hydroxypropyl acrylate	193-39-5	1 3		Carcinoge
Indeno(1,2,3-cd)pyrene	190-09-0	Acute Non-	1	1
	7440 74 6	Carcinogen		
Indium Note: Synonyms for some common chemicals are in	7440-74-6	Carcillogell	L ware than	Sea Helloa ta

a chemical in this table

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		Acute Non-	Chronic Non	
Chemical Name	CAS#	Carcinogen	Carcinogen	Carcinoge
		Acute Non-		
Methomyl	16752-77-5	Carcinogen		
		Acute Non-		
2-Methoxyethanol (Methyl Cellosolve; EGME)	109-86-4	Carcinogen		
2-Methoxyethyl acetate (MethylCellosolve acetate;		Acute Non-		
EGMEA)	110-49-6	Carcinogen		
		Acute Non-		
4-Methoxyphenol	150-76-5	Carcinogen		
		Acute Non-		
Methyl Cellosolve (2-Methoxyethanol; EGME)	109-86-4	Carcinogen		
Methyl Cellosolve acetate (2-Methoxyethyl acetate;		Acute Non-		
EGMEA)	110-49-6	Carcinogen		
_GMLA)		Acute Non-		
Mothylaandata	96-33-3	Carcinogen		
Methyl acrylate		Acute Non-		
Markey la and anitrita	126-98-7	Carcinogen		
Methylacrylonitrile	120-00-1	Acute Non-	:	
물론으로 (1일) : 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	74-89-5	Carcinogen	·-	
Methylamine	74-69-5	Acute Non-		
	440.40.0	#F197,F17441		
Methyl n-amyl ketone	110-43-0	Carcinogen		
•		Acute Non-		
N-Methyl aniline	100-61-8	Carcinogen		
		Acute Non-		
2-Methyl aziridine (Propylenimine; Propylene imine)	75-55-8	Carcinogen		Carcinoger
		Acute Non-	Chronic Non-	
Methyl bromide (Bromomethane)	74-83-9	Carcinogen	Carcinogen	
Welly Diomic (Diomonosic)		Acute Non-		
Mathut m hund kotono	591-78-6	Carcinogen		
Methyl n-butyl ketone		Acute Non-		
	74-87-3	Carcinogen		ab
Methyl chloride (Chloromethane)	3697-24-3			Carcinoger
5-Methyl chrysene	5037-24-0	Acute Non-		J
	427 AF 2	Carcinogen		
Methyl 2-cyanoacrylate	137-05-3	Acute Non-		
		The second secon	_	
Methylcyclohexanol	25639-42-3	Carcinogen		
		Acute Non-		
o-Methylcyclohexanone	583-60-8	Carcinogen		
		Acute Non-		
Methyl demeton	8022-00-2	Carcinogen		
Methylene bisphenyl isocyanate (Methylene diphenyl		Acute Non-	Chronic Non-	
isocyanate; MDI)	101-68-8	Carcinogen	Carcinogen	
isocyanate, ividi)		Acute Non-		
	75-09-2	Carcinogen		Carcinoger
Methylene chloride (Dichloromethane)	101-14-4			Carcinoger
4,4'-Methylene bis(2-chloroaniline) (MOCA)	101-14-4	Acute Non-		
	E404 00 4	1		
Methylene bis(4-cyclohexylisocyanate)	5124-30-1	Carcinogen		
		Acute Non-		Corrie
4,4'-Methylenedianiline (and dihydrochloride)	101-77-9	Carcinogen		Carcinoger
		Acute Non-		
Methyl ethyl ketone peroxide	1338-23-4	Carcinogen		
		Acute Non-		
Methyl formate	107-31-3	Carcinogen		
		Acute Non-		
Methyl hydrazine Note: Synonyms for some common chemicals are interest.	60-34-4	Carcinogen		
Methyl hydrazine		do mara may	e more than o	he listing to

a chemical in this table 05/05/2004

		1	Chronic Non	Į.
Chemical Name	CAS#	Carcinogen	Carcinogen	
Nitrilotriacetic acid	139-13-9			Carcinogen
		Acute Non-		
p-Nitroaniline	100-01-6	Carcinogen		
		Acute Non-		
Nitrobenzene	98-95-3	Carcinogen		
		Acute Non-		
p-Nitrochlorobenzene	100-00-5	Carcinogen		
		Acute Non-		
Nitroethane	79-24-3	Carcinogen		
Nitrogen mustards (2,2'-Dichloro-N-methyldiethylamine)	51-75-2			Carcinogen
		Acute Non-		
Nitromethane	75-52-5	Carcinogen		
		Acute Non-		
1-Nitropropane	108-03-2	Carcinogen		
		Acute Non-		
2-Nitropropane	79-46-9	Carcinogen		Carcinogen
1-Nitropyrene	5522-43-0			Carcinogen
N-Nitrosodi-n-butylamine	924-16-3			Carcinogen
N-Nitrosodiethanolamine	1116-54-7			Carcinogen
N-Nitrosodiethylamine	55-18-5			Carcinogen
N-Nitrosodimethylamine	62-75-9			Carcinogen
N-Nitrosodi-n-propylamine	621-64-7			Carcinogen
N-Nitroso-N-ethylurea	759-73-9			Carcinogen
N-Nitroso-N-methylurea	684-93-5			Carcinogen
N-Nitrosomethylvinylamine	4549-40-0			Carcinogen
N-Nitrosomorpholine	59-89-2			Carcinogen
N'-Nitrosonornicotine	16543-55-8			Carcinogen
N-Nitrosopiperidine	100-75-4			Carcinogen
N-Nitrosopyrrolidine	930-55-2			Carcinogen
N-Nitrososarcosine	13256-22-9			Carcinogen
N-NIIIOSOSAICOSIIIE		Acute Non-		<u> </u>
Nituated and (universe and increase)	88-72-2	Carcinogen		
Nitrotoluene (mixtures and isomers)	00-72-2	Acute Non-		
A Vitamania - montalia	10024-97-2	Carcinogen		
Nitrous oxide	10024-31-2	Acute Non-		
Ostanhlaronouhthologo	2234-13-1	Carcinogen		
Octachloronaphthalene	50-28-2	Carcinogen		Carcinogen
Oestradiol (Estradiol)	130-20-2	Acute Non-		Calcinogen
Overthe model	144 60 7	1		
Oxalic acid	144-62-7	Carcinogen Acute Non-		:
m 1 m c 1 n 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m	00.54.0	1 1		
P,p'-Oxybis(benzenesulfonyl hydrazide)	80-51-3	Carcinogen		C
4,4'- Oxydianiline (2,4-Diaminophenyl ether)	101-80-4	A and a Na a		Carcinogen
	101010	Acute Non-		
Paraquat (respirable sizes) (Paraquat chloride)	1910-42-5	Carcinogen		
		Acute Non-		
Parathion	56-38-2	Carcinogen		
		Acute Non-		
Pentachloronaphthalene	1321-64-8	Carcinogen		
		Acute Non-		
Pentachloronitrobenzene (Quintobenzene; PCNB)	82-68-8	Carcinogen		
		Acute Non-		
Pentachiorophenol (PCP)	87-86-5	Carcinogen		
		Acute Non-		
Pentyl Acetate (mixtures and isomers) Note: Synonyms for some common chemicals are inicu	628-63-7	Carcinogen		

a chemical in this table 05/05/2004

		Acute Non-	Chronic Non	1
Chemical Name	CAS#	Carcinogen	Carcinogen	
Polybrominated biphenyls (PBBs; Bromodiphenyls)	59536-65-1			Carcinogen
Polychlorinated biphenyls (PCBs; Chlorodiphenyls;		Acute Non-		Ci
Arochlor)	1336-36-3	Carcinogen		Carcinogen
	4040 50 3	Acute Non-		
Potassium hydroxide	1310-58-3 366-70-1	Carcinogen	*	Carcinogen
Procarbazine and procarbazine hydrochloride	1120-71-4			Carcinogen
1,3-Propane sultone	1120-71-4	Acute Non-		Carcinogen
Maria de la compansión de	107-19-7	Carcinogen		
Propargyl alcohol	1107-19-7	Acute Non-		
to the the control of	57-57-8	Carcinogen		Carcinogen
beta-Propiolactone	31-31-6	Acute Non-		Carcinogen
	70.00.4	1		
Propionic acid	79-09-4	Carcinogen Acute Non-		
	444.00.4	1		
Propoxur (Baygon)	114-26-1	Carcinogen	Chronic Non-	
	1-0 07 5	Acute Non-		
Propylene dichloride (1,2-Dichloropropane)	78-87-5	Carcinogen	Carcinogen	
Propylene glycol monomethyl ether (PGME)	107-98-2		Chronic Non-	
		Acute Non-	Chronic Non-	Oi
Propylene oxide	75-56-9	Carcinogen	Carcinogen	Carcinogen
	l	Acute Non-		
Propylenimine (2-Methyl aziridine; propylene imine)	75-55-8	Carcinogen		Carcinogen
Propylthiouracil	51-52-5			Carcinogen
		Acute Non-		
Pyrethrum	8003-34-7	Carcinogen		
		Acute Non-		
Pyridine	110-86-1	Carcinogen		
		Acute Non-		
Pyrocatechol (Catechol)	120-80-9	Carcinogen		
		Acute Non-		Harry.
Quinone	106-51-4	Carcinogen		i i
		Acute Non-		
Quintobenzene (Pentachloronitrobenzene)	82-68-8	Carcinogen		
		Acute Non-		
Resorcinol	108-46-3	Carcinogen		
		Acute Non-		
Rhodium (metal) and insoluble compounds, as Rh	7440-16-6	Carcinogen		
		Acute Non-		
Rhodium, soluble compounds, as Rh	7440-16-6	Carcinogen		
		Acute Non-		
Rotenone (commercial)	83-79-4	Carcinogen		
Safrole	94-59-7			Carcinogen
		Acute Non-		
Selenium and compounds, as Se	7782-49-2	Carcinogen		
		Acute Non-		
Silicon tetrahydride (Silane)	7803-62-5	Carcinogen		
13.00		Acute Non-		
Sodium Azide, as sodium azide or hydrazoic acid vapor	26628-22-8	Carcinogen		
COGRETT / LIGO, GO COGRETT GLIGO OF THORITON GOTO TOPON		Acute Non-		
Sodium bisulfite	7631-90-5	Carcinogen		-
Outuin plannic	1.00.00	Acute Non-		
N	62-74-8	Carcinogen		
ISAMUM TUATASATSIA	1 T T T	100,00,00		
Sodium fluoroacetate		Acute Non-		

* Note: Synonyms for some common chemicals are inicuded in this list, so there may be more than one listing for

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Chemical Name	CAS#	Acute Non- Carcinogen	Chronic Non Carcinogen	1
Chemical Maine	UAS#	Acute Non-	Ou. Cinogen	Ouromogen
The William selemental and colubio compounds as Ti	7440-28-0	Carcinogen		
Thallium, elemental and soluble compounds, as TI	7 440-20-0	Acute Non-		
Thian delarida	7719-09-7	Carcinogen		
Thionyl chloride Thiotepa (Tris(1-aziridinyl)phosphine sulfide)	52-24-4	Carollogen		Carcinogen
	62-56-6			Carcinogen
Thiourea	102.000	Acute Non-		
Thisasa	137-26-8	Carcinogen	,	
Thiram	1.0. 200	Acute Non-		
Tin armonia compoundo co Sp	7440-31-5	Carcinogen		
Tin organic compounds, as Sn Tin, metal, oxides and inorganic compounds, except tin	7-4-40-01-0	Acute Non-		
Tin, metal, oxides and inorganic compounds, except un	7440-31-5	Carcinogen		
hydride, as Sn	119-93-7	Joanningen		Carcinogen
o-Tolidine (3,3'-Dimethylbenzidine)	118-85-7	Acute Non-	Chronic Non-	Caromogen
,	108-88-3	Carcinogen	Carcinogen	
Toluene (Toluol)	1100-00-3	Acute Non-	Chronic Non-	
TON	504 04 0	Acute Non-	Carcinogen	Carcinogen
2,4-/2,6-Toluene diisocyanate (mixtures and isomers) (TDI)	05 00 7		Carcinogen	Carcinogen
Toluene-2,4-diamine (2,4-Diaminotoluene)	95-80-7	Acute Non-		Carcinogen
	100 44 4			
m- and p-Toluidine	108-44-1	Carcinogen Acute Non-		
o-Toluidine and o-toluidine hydrochloride and mixed	05 50 4			Coroinagen
isomers	95-53-4	Carcinogen	Chronic Non-	Carcinogen
		Acute Non-	F	
Toluol (Toluene)	108-88-3	Carcinogen	Carcinogen	
		Acute Non-		
Toxaphene (Chlorinated camphene)	8001-35-2	Carcinogen		Carcinogen
		Acute Non-		
Tributyl phosphate	126-73-8	Carcinogen		
	ling si e v	Acute Non-		
1,2,4-Trichlorobenzene	120-82-1	Carcinogen		+ y ₂ (*)
	Programme and the second	Acute Non-		
1,1,2-Trichloroethane	79-00-5	Carcinogen		
		Acute Non-		
Trichloroethylene (Trichloroethene)	79-01-6	Carcinogen		Carcinogen
		Acute Non-	·	
Trichloronaphthalene	1321-65-9	Carcinogen		
		Acute Non-		
Trichloronitromethane (Chloropicrin)	76-06-2	Carcinogen		
2,4,6-Trichlorophenol	88-06-2			Carcinogen
		Acute Non-		
1,2,3-Trichloropropane	96-18-4	Carcinogen		Carcinogen
		Acute Non-		
Triethanolamine	102-71-6	Carcinogen		
		Acute Non-		
Triethylamine	121-44-8	Carcinogen		
		Acute Non-		
1,3,5-Triglycidyl-s-triazinetrione	2451-62-9	Carcinogen		
11010 (1190) O GOZEGOGIO	1	Acute Non-		
Trimellitic anhydride	552-30-7	Carcinogen		
Trimellitic anhydride	100000	Acute Non-		
Trimathyl hanzana (mixtures and jeamers)	25551-13-7	Carcinogen		
Trimethyl benzene (mixtures and isomers)	120001-10-/	Acute Non-		
- · · · · · · · · · · · · · · · · · · ·	75.60.2			
Trimethylamine	75-50-3	Carcinogen		

^{*} Note: Synonyms for some common chemicals are inlouded in this list, so there may be more than one listing for a chemical in this table 05/05/2004 Page 19 of 20

Construction Permitting in Wisconsin

Focus Group Findings



February 2004

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Executive Summary

Introduction

This report presents the results of focus groups conducted with firms that received construction permits from the Wisconsin DNR. The Bureau of Air Management initiated these meetings as part of its wider effort to streamline the issuance of permits. During the discussions applicants described the problems they experienced while applying for a permit.

The Study

Researchers conducted five focus groups with permit applicants, one in each of the DNR's five regions. They held two more groups, one with small business applicants and one with permit consultants. Approximately 40 actual applicants participated in these discussions. All 40 were selected because they were known to have had problems, because they had extensive experience applying for air permits, or both. Supplemental discussions were held with representatives of various environmental interests and with economic development specialists. The latter included specialists employed by counties and cities to promote local development.

Principal Findings

Permit applicants complain that the process takes too long and costs too much and is unpredictable. Applicants don't know if or when the agency will issue their permit. Thus, they don't order equipment, schedule contractors, or pour foundations. While they wait, they believe they're losing business opportunities and money. Some participants say that these difficulties and delays in obtaining a permit have caused them to expand their operations in states other than Wisconsin.

Applicants also find the system to be inconsistent. The permit they receive may depend upon where it is written and upon who writes it. Many feel that it is easier to work with regional permit reviewers than with reviewers in the central office. Regional reviewers impress them as being

better oriented towards their customers, more responsive, and more likely to be knowledgeable about the facilities of their applicants. Some applicants note that the rules are variously interpreted, no matter where the reviewer is located. They feel that the experience of the reviewer and the complexity of the rules contributes to this inconsistency.

Before our participants apply for a permit, however, they find themselves confused as to whether they even need one. Do they qualify for an exemption? Some say it's hard to tell. Then, even when they know they need a permit, they may have trouble finding out which forms are required. Forms are now available on-line, but some users report trouble downloading them. Some business owners would like to submit their applications electronically, but believe this is not yet possible. They report at least two problems that arise with applications submitted on paper. First, they're less convenient. Second, some participants believe that the permit reviewers retype them, with the result that errors creep in.

Given the pressure to begin construction some applicants request expedited permits. Not all of them believe, however, that their permit is actually expedited. Once they submit their application they say it enters a "black hole" and that they receive little feedback on its status. They may contact agency staff frequently to find out if the application has been received, if it appears to be complete, or whether they're required to supply additional information. They note other problems communicating with the staff: even when they get a reply to a phone message or an e-mail, it isn't timely.

A number of applicants are frustrated by permit reviewers' reluctance to define their application as "complete." Once such a determination is made the reviewer is bound to a deadline for completing the review. Some people feel that the writers withhold this determination until the permit is almost ready for public comment. Applicants recount receiving draft permits with many errors. Correction of the new errors puts applicants back into the loop, phoning, waiting, and so on. Others complain that their permit is

held "hostage" until they agree to comply with conditions they regard as onerous. When disagreements between the applicant and permit reviewer arise there is no system or structure for resolving their differences (short of involving attorneys or elected officials). This process can produce a final permit that is far from ideal.

Applicants with permit experience in other states say that Wisconsin is one of the hardest states in which to apply successfully for a permit. The rules are more complex; the agency is strict in its application of these complex rules; and the interpretation of the rules is too often inconsistent. They point out that some states provide permit coordinators who take responsibility for shepherding the permit through the system and otherwise assisting the applicant. Wisconsin lacks this kind of support. Given these difficulties, applicants say that their firms are less likely to expand production and operations in Wisconsin.

Introduction

The Department of Natural Resources has initiated a process to streamline the issuance of Air Construction Permits. Part of this initiative includes gathering information about permit recipients' "problems and concerns" related to the construction permit program. This report provides a summary of their concerns. Drawing on systematic conversations conducted with permit applicants in seven focus groups, it documents their issues and concerns about the permitting process.

Background

The problems summarized in this report are neither new nor unknown. The construction permit program has long been the target of criticism by those it regulates. The 1983 Governor's Report on Permit Streamlining contains many of the same concerns voiced by applicants and repeated in recent industry reports. The Governor's Report noted the following issues:

- Delays in permit issuance put investment at risk.
- It takes too long to process permits; this undermines the competitive position of the applicant.
- Applicants should be allowed to commence construction 'at their own risk'.
- Permits fees are too high.
- Wisconsin's standards are more rigorous than federal ones; the state should follow Federal rules.
- Permit applications move faster in adjacent states.
- Regional staff are more familiar with local operations and have better working relationships with local industry.
- Permit writers avoid activating statutory deadlines by requesting additional information.

More recent reports by the Paper Council and by Wisconsin Manufacturers' and Commerce restate these concerns. The WMC report, for example, includes the following concerns:

- Wisconsin's regulations drive businesses out of the state and make Wisconsin an unattractive place in which to do business.
- Wisconsin's regulations are more stringent than those of adjacent states.
- Other states issue air construction permits more rapidly than Wisconsin.
- Plants that are part of multi-state operations lose investment to plants in other states because Wisconsin's permitting process takes so long and imposes so many burdens.
- Wisconsin's state only rules exceed federal standards.

Methodology

This report relies on data drawn from focus groups. Such groups typically consist of six to eight people sitting at a table discussing selected topics under the guidance of a trained moderator. Discussions are informal and in-depth, often lasting two hours or more. The moderator's questions are open-ended. This allows participants to express their points of view in their own words. The group setting allows participants to interact and to compare experiences.

As a method for collecting information, focus groups are limited. They collect narrative rather than numerical data. They develop insight rather than statistical projection. Their findings apply only to the people physically present in the room.

These are cautionary words that accompany any standard focus group report. The statements made by participants in focus groups are not regarded as having statistical value. Some focus group participants are, however, selected randomly. These were not. These participants were present because groups representing industry recommended them or because they themselves

had recently been granted construction permits and had complained about the process. They do not constitute a random sampling of people applying for construction permits in Wisconsin. This is a second reason that we do not grant their statements formal statistical value.

Nonetheless, certain experiences and concerns raised in these groups recur in ways that suggest they are widespread. The matters discussed fall into categories. Quotations are grouped by category or recurrent theme. A single quote represents several very similar statements, made by more than one participant unless otherwise noted.

Participant selection

Participants in these groups were selected and invited by staff in the Bureau of Air Management. Some of those who attended were chosen because their names and firms had been volunteered by industry groups. Others were chosen because they had recently received a construction permit and/or because they had extensive experience with construction permits. Seven focus groups were held around the state. One group consisted solely of consultants, a second solely of small firms. Approximately 40 permit applicants participated in these discussions. Finally, two supplemental focus groups were conducted. One consisted of economic development specialists and the other was drawn from among environmental law advocates and representatives of environmental groups. The results of these discussions appear in the Appendix. The discussions were moderated and this report prepared by Department social scientists Charlene Drumm and Edward Nelson.

Organization of the report

This report falls into three broad sections:

- 1. General concerns about the structure and function of the permitting system
- Specific concerns about permit processing
- 3. Recommended changes

Acknowledgements

The success of this work was critically dependent on help from the staff of the Bureau of Air Management. Often the most difficult aspect of conducting focus groups is logistics: identifying participants, making personal contacts, and securing a convenient location. Laurel Sukup, Dave Minkey, Lauren Hambrook and Eileen Pierce assumed these responsibilities. They got the right people in the right place at the right time. This is no small feat. Special thanks go to those who participated in the groups. Some drove long distances; all took time from busy lives to attend. They were candid but always cordial.

Obstacles to Timely Permit Processing

Presented below is a short list of the obstacles permit applicants say they encounter when they apply for a construction permit.

Regulatory issues

- Complex rules that are difficult to interpret yet strictly applied
- Command and control rules governing each process in a plant. (i.e., there is no "bubble")

DNR/EPA relations

- Intervention by Region V of the EPA to challenge DNR decisions related to construction permits
- Poor communication between the two agencies on matters related to an application.

Permit processing

- Delays in determining whether or not an applicant actually needs a construction permit
- Confusion about which forms are required
- Trouble acquiring or otherwise accessing the forms
- Loss of applications; applications going astray
- Numbers of staff inadequate to rapidly process applications
- Staff inexperienced or unfamiliar with the industry or facility being permitted
- Poor communication between staff and applicant on matters relating to the application. (E.g., staffers don't return calls or e-mails)
- Repeated requests for more information from applicants
- Inefficient and inconsistent processing of applications
- Incorrect modeling / applications stalled in modeling
- Errors in draft permits

Section I: Structural Concerns

This section of the report discusses applicants' concerns about the structure and functioning of Wisconsin's regulatory system.

Overview

The permitting process takes too long and costs too much. Construction is delayed and firms are tempted to expand their operations in other states. Delays weaken the competitive position of state firms and cost them business.

Regulations and their application

Wisconsin has a complex set of air rules that the program applies in a rigorous fashion. These rules may be unique to the state and may also exceed federal requirements. The Air Program is aggressive, developing new rules and attempting to lead the nation in their strict enforcement. This regulatory emphasis absorbs time and resources. It makes the state less attractive to business. The staff should use its time writing permits.

Interstate comparisons

It's more difficult to get a permit in Wisconsin than in other states. Other states offer more assistance and have a more "welcoming" stance than Wisconsin. They may provide permit coordinators, easier application formats, and they may offer lower permit fees, more liberal exemptions, and a faster start to construction.

Inter-agency relations

Region V of the EPA intimidates the staff of Wisconsin's permitting program. Wisconsin more readily accedes to Region V's demands. There is poor coordination and communication between the agencies. This stalls some permits.

Intra-agency issues

Permitting is more efficient when it is performed by regional offices. The staff understand the facilities, have a working relationship with the firms, and are easier to communicate with. The central office is regarded as more rigid and uncommunicative.

Permit review and processing are inconsistent. Despite a high degree of centralization, applicants' experiences vary, depending too much upon who completes their permit. Staff members may differ in how they understand, interpret and apply the rules, how familiar they are with the industry, and what information they require.

The program may be understaffed. There may not be sufficient personnel to provide the detailed review required by the program's rules.

Time

It takes too long to get a construction permit.

This is the longstanding complaint about the construction permit program. Industry has complained for literally decades about the time it takes to get a construction permit. In a 1983 presentation to the DNR, for example, industry described the permitting as a "tedious, slow, adversarial process [that] prevents Wisconsin from competing with the reality of fast track procedures that exist in other states." (WMC, 1983:17) Today's participants repeated this complaint.

Complaints about time

The following comments reflect applicants' frustration about the time it takes the Department to process their permits.

It's an extraordinary amount of time in order to be able to go from the beginning of the process to the finish.

My biggest issue, as I stated when we came in, is the time frames. I mean we can deal with getting the information they want. We can deal with paying the fees. We don't like them, but in return we have to have the permit move forward.

The primary concern we have is the timing. We need to respond to market forces almost immediately.

Yeah, it's not just the cost of the permit—it's the cost and time and headache. I can't quantify it adequately here, but it's time and money and then compliance.

The big thing for us was the time taken to get a permit.

Time is also an issue. There's no question about that. We actually put over a year total into our permit and it was eight months at the DNR. We thought we would get it in four months. It took eight. Construction was set back by four months. We accepted some of the delays but it got pretty testy at the end.

I know that sometimes those can be iterative processes but this has taken a long, long time and there are still some contentious permit condition issues that they are going through trying to resolve even this week.

It just took a long time and I think that's probably the frustration we all share.

This applicant made a purportedly minor change.

[The permit reviewer] said "Yeah, send it directly to me. I'll get it done. I should have my review done in three weeks. Then you'll have the 30 day public comment period." We didn't get the permit for six months.

Applicants doubt Department estimates of time required for processing

Some applicants don't believe estimates of how long it will take the Department to process a construction permit. Some suspect that estimates given reflect the time that usually elapses between the officially sanctioned completion and date of issuance. Applicants believe the measurement period should begin when they submit the permit to the Department.

The bureau director will tell you that the national average for major source permits is 18 months. And that they [Air Management] are able to beat that because they get theirs out in twelve. But she has not been able to provide any detail on how that average has been developed.

In the DNR's mind it took two months to process this permit. From when_they deemed it to be complete. And I think that's the baseline they use. Really we put it in six months in advance of that time. That would be one of my pet peeves.

If you look at my permit the Department will say they processed it in a week. And I'm at month [more than a year]. If they actually processed it that fast they should be charging me the expedited fee [and they didn't].

Application Costs

Applicants complain about permitting costs.

Permitting costs are a secondary but significant concern for some. During the discussions they mentioned the following costs:

- Processing fees
- Fees for an expedited permit
- Consultants' fees
- Costs of staff time devoted to project
- Costs resulting from permit compliance

Costs

Applicants commented on the costs they incur.

Another frustration is permit fees. A major modification is \$15,000. I can't see what the value is: waiting nine months and then paying \$15,000 for the end result.

Our air permit for the business by the time we got done with it was over \$100,000. From the DNR and consultants. We did a lot of work ourselves to take some of that cost out of consultants' hands.

I'd say overall we probably spent \$500,000 in permitting fees and consulting fees to get these applications taken care of, to do stack testing. So it was pretty costly for us.

Our permits average anywhere from \$30,000 to \$60,000. By the time you get done with the consultants' fees it's about \$100,000.

Costs increase when applicant negotiates permit.

Costs increase when applicants "go back and forth" with the DNR. Applicants who use consultants are especially concerned about these costs.

The more times you have to use your consultant for problems, the more cost you have.

And every time someone comes back with a question it costs me more money [in consulting fees].

When it gets to any of these issues—BACT, LACT, LAER—I have to go outside. You start paying \$140 or \$150 an hour for your consultant. Every time the DNR asks a question they just added \$1,000 on this end. Next question: \$1,000.

Uncertainty

The permitting process is uncertain.

The process is not only slow it's also uncertain. It may take six weeks or six months. If the project is complex or if there are other complications it may well take longer. Such uncertainty stalls planning for construction. While they are waiting for their permit some don't order equipment, schedule contractors or begin construction.

Uncertainty

This consultant discusses the trouble he has estimating how long it will take for his client to get a permit.

The whole problem is the certainty issue. I think that we all can give our clients a fixed cost for what it's going to be to get the application together. What I never can tell them with certainty is what it's going to be, the back and forth and the follow up.

Construction delays

Applicants cannot confidently predict when they will begin construction. This means they cannot schedule contractors to do the work. While they're waiting, the ground may freeze, workers may be idled, and so on. The following comments reflect their frustrations in this matter.

We have a lot of pressure to get construction beginning. Everyone was asking how long it would take to get through the process.

It's hard to be at the mercy of something else when you have so many pieces that have to fit in place.

We usually let them know when we need the permit by. Try and put some time constraints and sometimes it helps and sometimes the date comes and goes and you still don't have your approval at which point the construction schedule at the plant slides.

You're going to have a lot of people involved with this. They're also trying to plan their schedules, and now you have a piece of equipment sitting in somebody's yard taking up space, okay. When are we going? And everybody's waiting around. There's a lot of people being hung up by waiting to get this done.

Weather

Applicants note that winter in Wisconsin presents a serious complication, especially in competition and comparison with other, balmier states. While they wait for their permit the ground may freeze.

You have to get the foundation in before the ground freezes. That's a big deal in this country.

The first day that we could actually begin construction is two weeks after we should have started. And during those two weeks we had 70, 80 degree weather, could have gotten it installed. And now we're basically trying to figure out how we're going to get this thing in the ground.

Some consequences for the firm

In short, uncertainty and delay mean lost business. The firm cannot respond to market opportunities in a timely fashion.

Frequently our client and someone else is competing for the same contract and whichever one gets their permit first gets the work.

I better be able to provide them with this widget by June 1st because if I can't [and] my competitor can, he gets the work.

A lot of time first to market wins. The company that gets its product on the street first gets the market share or keeps their customers.

Strict Regulations

Wisconsin's rules are more restrictive than those of other states.

Applicants say that air rules are not as strict in other states as they are in Wisconsin. They also believe that Wisconsin goes beyond federal requirements.

Wisconsin is stricter

In other states that I work in, they're working on applying the rules. You come to Wisconsin, they're trying to figure out how to get the rules to make you do something more than what you should be doing.

They want to be a more stringent state than other states.

There's certainly an uneven playing field across the U.S.

It didn't seem like Ohio was as restrictive as Wisconsin only because we purchased a plant from Ohio and when I saw what was listed for that piece of equipment it was one page.

When I look at permits for similar facilities in other states—the state of Wisconsin is the most stringent. Maybe not even on emission rates but on record keeping. The question that comes back is do all these additional requirements add any environmental improvements?

Wisconsin exceeds federal standards

Applicants believe that Wisconsin's rules go beyond the standards established by the federal government. They believe further that the Department wants to be a leader in developing and applying stricter rules for pollution control.

Wisconsin has always prided itself on being in front—being more stringent than the Feds—and that's a cultural thing. "Look: Wisconsin is suing the EPA now!"

Wisconsin ... has a drive to be a forefront state.

Wisconsin is one of the worst ones in going beyond what the EPA requires.

Several applicants pointed to Wisconsin's efforts to enlarge the list of hazardous air pollutants as an example of its going beyond federal requirements.

They led the charge on mercury. Under NR 445 we are driving to set standards way ahead of the federal government. The federal government has 165 HAPS; Wisconsin wants 600.

Some also feel that Wisconsin is taking the lead in resisting the reform of New Source Review rules.

The concern that my company has is that very recently STAPPA/ ALAPCO came out absolutely trashing EPA's program. And STAPPA/ALAPCO is led, the President happens to be the head of Wisconsin's Air Bureau. So the perception is that Wisconsin is again driving the non-reform. We're leading the charge to maintain the status quo.

Wisconsin pays more attention to detail, unnecessarily

Permit reviewers are more likely to re-calculate the numbers that are submitted. Consultants say this doesn't happen in other states.

The level of detail here in Wisconsin—the DNR permit engineers duplicate a lot of the consultants' efforts more than in other states. They double-check our calculations. They go right down to the level the consultant does and I don't know if that's necessary or done in other states. The work they do to review is very thorough and they redo the analysis that the application has already presented. [Moderator: "Is this necessary?"] I think this is absolutely NOT necessary.

Some believe that the permit writers want to be as tough as possible.

You almost get the sense that the Wisconsin permit writers, at the end of the day, define their success by how tough they can write your permit. I actually believe that. That's not a fact. I can't say it as fact but that's what I believe.

Interstate Comparisons

Other states make it easier to get a permit.

Applicants believe that other states have made efforts to minimize the burdens of environmental permitting. Applicants with facilities in other states described some of the steps those states have taken to make things easier for them:

- Provide permit coordinators
- Grant waivers and exemptions more freely
- Be more cooperative
- Require less information
- Provide efficient formats / media for submittals
- Require shorter, simpler permits
- Lower the costs for applications
- Allow faster starts to construction

Permit coordinators

Some states provide applicants with permit coordinators to assist in all phases of the application process. When multiple permits are required they coordinate all of them within their Agency.

In Iowa, the DNR assigned a person to walk through the whole thing. That person took water, emissions, erosion, retention, everything under his jurisdiction. When I talked to people in Madison: "That's not my department. I can't answer that question." In Iowa this gentleman just took it from day one and stayed until construction was completed and operation was achieved. Whereas Wisconsin is more cumbersome.

If you came to Wisconsin totally cold you'd be bouncing from department to department for days.

A lead person really made the difference. That guy knew exactly what we had to have from day one and he kept every department up to speed. It just seemed to go so much smoother. Kansas does that. When you come into Kansas they supply you with somebody. Not a DNR person. That person is your lead person in Kansas. Following through on it, telling you what you have to have, and who you see, and where they're at. Then he'd follow up.

Easier

I have a business in Iowa also and had to go through the Iowa permitting process also. Very, very easy. We used a consultant on a limited time basis. We did almost all of it ourselves except for some of the calculations on some of the emissions. That was it. We got it done in about seven weeks.

Texas is Texas. They have a tremendous way of getting things done.

The Arizona permitting was very, very simple. I called and talked to the person who started the process and they said, 'Oh, all I have to do is—I got a couple of forms and we have to fill this out and we're good to go.'

Waivers and exemptions

This participant, with extensive interstate permitting experience, feels that other states grant waivers and exemptions more readily than Wisconsin.

Wisconsin has been left in the dust compared to other states and what they do is allow business to expand and make changes. You can do a waiver to commence construction while they are processing it. You have more exemptions in terms of the whole process. When they do permits some states commit to 30 days and if you don't get it you can begin anyway.

I find that when we work in other states having worked primarily in Wisconsin, I'm calling them back: "Are you sure that's exempt? I can't believe that's exempt." Because you're used to problems you'll get snagged on.

This applicant enumerated several advantages of permit programs in adjacent states.

Minnesota is better. They are less prescriptive as far as process-descriptive limitations. They don't have a LACT determination kind of thing. They have plant-wide limits versus you want this one process. They don't have a state HAPS program.

[The big advantage in Minnesota] is that they have a single permit system. They don't have a construction permit and an operating permit. They'll just issue you an operating permit and you go back and get modifications that allow you to modify your source.

Willingness to help

Some applicants feel that other states are much more interested in working cooperatively with them than Wisconsin is.

For me there's such a difference between Michigan that wants to help industry and Wisconsin where it seems like they kind of do everything they can to prevent you from doing something.

Michigan finds a way to work with industry to make it happen. In Wisconsin they find ways to make it not happen or to make it very difficult.

I've had experiences in our newest plant in Oklahoma. PSD. In nine months I get a permit for a PSD major project. Review. Modeling. You name it. They were willing to come to the table. And understand our relationship, how our business operates. It's almost like they [Wisconsin] are not willing to view how business operates, how we need the flexibility.

On the other hand, Wisconsin welcomes industry only on the state's terms.

I'll go back to the perception of my corporate office: Wisconsin is not welcoming business. There's no welcoming here. It's not "Let's see how we can make this work for your company." It's more like: "You come to us and we'll tell you what you got to do to work here."

Faster construction

Some applicants referred to projects in other states. They'd heard about construction that started within weeks of someone's initiating a permit.

Give you an example—the gentleman who started [type of project] the same time I did back in 2000 ran into the same problems. He went to Kansas. He gave them what he wanted to do. And the Kansas DNR said you can start anything you want to start—construction—we'll make sure we get the permit to you—with the parameters you're asking for. He was on the ground in 13 days moving dirt and it took us about a year and a half before we moved dirt. That's an actual honest, true story of what happened.

Illinois—of course you can't understand anybody down there—but they're quicker also.

[Corporate permit preparers] said frankly they could have done this same project in a non-attainment area in the South more quickly than they could have done it in an attainment area in Wisconsin.

Application forms

Some participants note that other states streamline their forms, requiring less information from the applicant.

The amount of information that is required in a permit application and the type of permit that we get back is a little bit more streamlined. For instance, we'll submit information on their permit applications and their permit applications are in an electronic format—which are either in Word or Excel, which is convenient for us. In Michigan it's a much simpler process and we get information back to us that was as we provided it to them. And it's the same in South Carolina and North Carolina and several other states I've worked in—Texas.

Cheaper Permits

A consultant compared the fees charged by Ohio to those charged by Wisconsin.

I had a situation where a client decided to process two applications: 1 in Ohio and 1 in Wisconsin. Same project. The Wisconsin fees were over \$100,000 and the Ohio fees were \$12,000. Let me say they didn't get a permit in one of the states. They withdrew it because they got the Ohio permit first.

DNR/EPA Relations

EPA's involvement further complicates permit issuance in Wisconsin.

Wisconsin is part of the EPA's Region V. Some applicants, notably those in southeastern Wisconsin, feel that this involvement complicates the process of issuing permits. They say permit writers may be more cautious, and possibly more stringent because of pressure from Region V. Some wonder about poor communication and coordination between the WDNR and Region V. Others feel that DNR staff is reluctant to raise and resolve issues with the EPA.

Concerns that EPA may overrule Wisconsin's decisions.

Some applicants say that EPA oversight and the existence of two sets of rules, with resultant caution in the DNR, increases the sense of uncertainty they feel as they write applications and wait for their permits.

There was always this question of, the DNR had their opinion on what had to be done but there's also the 500 pound gorilla, the EPA, that could come in at any time. "So this is our opinion. But you never know what the EPA might do or say." There didn't seem to be people either willing to be thorough enough to work with EPA to get a final decision out of them or they weren't really willing to take a stand on their decision.

Having two sets of rules is hard for consultants to deal with. They're doing their work in good faith to accomplish what the DNR is asking. Then the EPA comes in with another set of standards and skewers the whole thing.

Some think that Region V is more aggressive than other EPA regions in enforcing air quality regulations.

We sat through a conference the other day and Region V has an order of magnitude when you look at enforcement cases in the country between all the regions. Region V has the most on the books by double. Region V has over 60 enforcement cases going right now. The next closest region has 26. So Region V is just a very aggressive enforcer.

Others believe the EPA is antagonistic toward innovative cooperative agreements between the WDNR and industry.

The Office of Enforcement and Compliance Assurance in Region V really does not like those cooperative agreements. They are looking for an opportunity to publicly hang some company that has a cooperative agreement that has gone beyond their limits. "Look: you give these guys a little flexibility and what do they do? They break the law. We've got to sue these guys. Furthermore, we would really rescind the whole program."

Some people suspect that the DNR is intimidated by EPA Region V.

The EPA has given them the right to administer the rules—but there's been times lately where the EPA has come in and tried to second guess. That's where the DNR is running scared right now.

But I get the feeling that the DNR sometimes is going a little farther than they need to because they're afraid that EPA might overrule them.

What I see there is I think the DNR has become very spooky of the EPA. They in good faith do what they think is right and all of a sudden the EPA comes in and says "Wait a minute, we have to change the CO or the NOX." So I think they're trying to cover their backside a little bit and that's unfortunate. They have to be more cautious that they don't want to get themselves in trouble by issuing a permit. And that's going to become more of an issue as time goes on.

Others think the EPA regards Wisconsin as more compliant than other states.

I think EPA Region V has figured out that if they want something in Wisconsin they're more likely to get it than if they want the same thing in Illinois or Ohio. So they'll push the issue in Wisconsin because they know they can get it.

Communication

Some applicants report that they find themselves shuttling back and forth between the two agencies in an effort to get a decision. This suggests to them that the agencies communicate poorly and thus fail to coordinate their policies.

You'd call one and they'd say, "Well, the WDNR would have taken care of this." We'd call the DNR and they'd say "We're governed by EPA on these standards." This phone tag thing really got to be frustrating. And it elevated the cost. There's two agencies here that seem to have the same responsibilities but do not communicate real well on some cases.

I wanted to go back to the DNR making a decision when it comes to construction permits. Making sure that they feel comfortable with those decisions and that the EPA would be in agreement. There needs to be more communication between the DNR and the EPA. I'm wondering if everything is too messy and [the program] should just go back to the Feds.

Finally, a few applicants complain that the DNR hides behind the EPA and Region V. The DNR justifies its decisions based on the policy of Region V.

They do play a lot of hide and seek and behind Region V.

By default, they're pushing you into a program that you have no choice, and up until in our NR445, DNR's position on this was to hide behind federal. Every time you ask them why are you doing this, well, we're just complying with federal laws.

That's an area where you have technical discussions and disagreements. There's a lot of referring to EPA, that they say, "they say." Every other state you go to and they don't have to do it!

Shift regulatory authority to Region V

On the other hand, a minority of applicants—representatives of larger industries—suggested that their firms would benefit if Region V were to administer the air rules.

There are people in the paper industry—they would rather have the EPA run the program than the state. Because there would be continuity with the federal rules compared with what we have now.

I'm wondering if there are benefits of DNR running the Title V program. What would happen if the EPA were to take over? To some extent, with NSR, the [industry] would have a lot of benefits if the EPA took over that program. I'm just wondering if everything is just so messy maybe it should go back to the Feds. Instead of questioning what the EPA is going to do or say, we would just work directly with the EPA and we'd know the answer and there wouldn't be this gray area.

Is there a benefit to being SIPED instead of FIPED?

Implications for Expansion

Wisconsin's permitting process makes it more attractive to expand operations in other states.

Applicants stated that Wisconsin's permitting requirements encourage their firms to expand outside the state. In their view the regulatory playing field isn't level. Firms move to those states where the process is easier, cheaper and faster.

Investment

Applicants suggest that firms aren't making new investment in Wisconsin.

I've been with the company for twelve years. I don't see any investment in three of our four business operations. The investment is outside of Wisconsin. They've invested in South Carolina and Texas. Certainly in Mexico and China.

I don't think that right now our firm would build a plant in Wisconsin. The last one was in Mexico. The regulatory agency is a lot of it. We have an excellent labor force. But I don't think you'll see them start another one in Wisconsin.

Our middle manager said that Wisconsin's not even on the radar screen in terms of significant investment.

Rather than put business in Wisconsin we're going to take it out of state.

Delay and relocation

Firms shift production to other states because of how long it takes to get a permit.

Wisconsin: It takes too long. They drag their feet. Firms don't even want to go through that headache. And that's coming from some pretty big companies.

We've got into situations where the [equipment] is coming in and we know it's going to take 9 months to get a permit. We'll ship it someplace else. It's a real concern for the state of Wisconsin. From a business growth aspect. Companies are making decisions based on the permitting process. Ship it to another facility, or another state.

That's starting to happen. Business decisions are being made on how long is it going to take to get a permit. I'll come back with "nine months." And they'll say, "What about New York?" I'll say "four months." And guess where the [equipment] is going. So that's become the reality. Business decisions are being made based on that timeline.

This major firm needed to expand production on very short notice. Its management didn't feel that the DNR was as helpful as it should have been. Given this experience the applicant believed that management would consider expansion elsewhere.

[Expanding production on short notice] was a difficult situation for us. We did get the permit, but situations like that make management think twice about whether or not they want to stay here or in another state where, you know, "Go ahead and do it and we'll catch up on the paperwork a little bit later on."

Globalization

Globalization means that production can be shifted not just to other states but to other countries. Participants also note trends in corporate downsizing. Some are concerned that their own jobs are at risk.

I mean it's real scary, paper mills are closing down across the state. I mean we're looking at down-time later this month. It's just—not to say that that's a DNR thing at all, but it's just—you know, we've got to keep Wisconsin competitive for all of our sakes and if—it's just a very scary time.

We're competing globally. We're competing with people in China and the Asian rim. They don't have permits. It's very difficult for our facility to compete and make changes when we have such a structured, rigorous, bureaucratic system, and it takes so long for these things to make it through.

As far as comparing Wisconsin with other states we should also be thinking about the state of Wisconsin vs. other countries. It's a global economy. We've got plants in different countries. We don't do the same processes in different countries but we might be looking at that in the future, depending on how easy it is to set up a business and continue all our processes.

Central Office/ Region Comparisons

Applicants find it easier to work with the regions.

These applicants say that it's better to apply locally. Given a choice most would probably decide to have their permit processed at their regional service center. Regional staffers are more readily available and accessible. They answer phone calls from local businesses; they respond to e-mails; they become familiar with the plants and processes they regulate.

NOTE: The central office handles all major source and major modification permits, while the regional offices generally process the simpler, minor source permits.

Comparisons

Applicants often relate that their experiences with the central office are harder than with their regional offices.

We're perpetually in the air permitting program. We did a permit that went through the southeast region and really, that permit was handled appropriately, fairly, expeditiously out of that district. At the same time we had a permit ... that was kicked to Madison to issue that permit. It took many months to get that permit. The central office is much more difficult to work with and things take quite a bit longer. It's always bad news when we get notified that it's going downtown.

I have to concur with that 100%. Madison did ours and now we're at [regional office name] and it's a different world to deal with. Go in there and they'll sit down with you and go through it with you and really go through a process of everybody understanding what we're doing. In Madison it was always impossible. It would be a two week wait and then they'll talk to you for a couple hours and then there will be a two week wait. And it just went on and on and on. I have to agree 100%. It seems like downtown Madison it's much tougher to get something done.

Certainly, not all applicants have a hard time with the central office. Some feel that as the staff learns about their operation they write better permits.

The last permit was a lot better with the central office than the one before. It was the same guy. But he had found out more about our business. But they're still a lot harder to work with and, like, they don't trust you.

Familiarity with facilities

Applicants believe that because regional staff members are more familiar with their facilities the permitting process goes more smoothly at the regional level.

[We deal with] the Fish Hatchery group. They understand more, understand the process, understand our operations, work more with us than what you get downtown.

The central office: we've had a lot of problems with them. The district ones know a lot more about your place.

[Applicant] had a very good relationship with the guy from the Waukesha office, who had been back and forth to our plant many times. I've spoken to [permit writer] a couple of times now and he's very easy to work with, very nice guy. He's very knowledgeable about what our facility was and what we were trying to do. They were very easy to contact.

Working relationships / communication

Applicants often find it hard to communicate with the central office staff. Some even wonder if staffers mistrust them. Staff members stop answering questions after a certain point.

We have to go through Madison. It was easy to get a hold of somebody in the beginning, but getting the calls and emails returned were not. We had a hard time getting back and that was our consultant that was doing that. And we'd always be on her, constantly, "Did you get a hold of him, did you get a hold of him?" And she'd say, "I got a hold of him, but he won't return my email or my phone calls."

I get the impression that the regional offices have jumped more on the customer service attitude and their responsibility, that they need to be responsive to questions, and they need to call back.

I think attitude is a lot. They're really looking for some way you're not being honest with them and we're always looking for that loophole that is out there. They say "You're not telling us the whole story."

They recognize that central office staff members have heavy workloads and that this gets in the way of personalized service.

I think that in the central office there's just too much that's down there. I just picture them being buried under a pile and they're all probably very talented and want to do the right thing. They just cannot get out from under.

Strictness

Some think the central office is stricter.

In my experience it's always been tougher from the central office than from the southeast. Central is putting in more stringent [requirements].

That's what I got—the people I was dealing with in Madison at the air bureau in renegotiating this general operations permit for [equipment]. If you were interpreting the regulation and it could be interpreted either way they would always choose the way that was the most work for us, the most work for them.

Now we're out at [a regional office] and it's a totally different approach to how we are treated. From the standpoint that they are willing to sit down with you and look at it and make an appointment. You spend an hour's time with [agency person] and you get somewhere. We get things done.

Speed

Some participants find that permits are processed more slowly at the central office than in the regions.

I think there is a theme that we see. If it stays in the district it gets processed a whole lot faster than if it comes to Madison.

The Service Center has the reputation of snapping them out.

They seem to work on it right away and get it done (in a local office). Granted they probably don't have as many permits coming into that office.

Variations across regions

Applicants also note some variation in service across the different DNR regions. Some regions may be easier to work with than others. A few applicants feel that it's somewhat more difficult to get a permit from the south central region.

With the Fish Hatchery they seem overworked. And they don't have a whole lot of time. We also work with the [regional] office and they seem a lot easier to work with and just don't really question our intentions as much as Fitchburg seems to do. I get the sense they always have their enforcement cap on and they're trying to figure out how we're going to screw the system.

Consistency

Permit writers differ in their interpretation and application of the rules.

Applicants believe that there is significant variation among permit writers. The permit they get depends on who writes it. Writers vary as to how they interpret the rules. They ask for different kinds and different amounts of information before they make their decisions, and some are more willing than others to reach a conclusion.

Permit writer crucial

Participants note that the permit writer plays a critical role in the quality of the applicant's experience with the DNR.

I think we've heard enough examples that the permit writer makes or breaks the process in many cases.

I've had good experiences and not so good experiences. It depends on who the permit writer is.

Variation across writers

Applicants note that different writers have significantly different approaches to writing permits.

There's a huge difference in who you get doing it.

It goes back to consistency. My biggest thing is the consistency of permit writers from region to region.

Interpretation by every single different field agent is different. One agent can say "We want this and this." Then he moves to another location and all of a sudden it's OK. There is no consistency.

It all depends on who you get hold of. Who the permit writer is or who makes the final decision at the DNR.

Depending on who you talk to at the Department you can get it done much easier than someone else. This creates some credibility problems. If you have a permitting process it should be consistent. There shouldn't be all kinds of different requirements for the same [type of operation]. The permit at the plant in [location] had 10% of what we had to do. It was totally day and night difference.

Requests for information

Writers are inconsistent in the amount of information they request from an applicant.

From my experience the consistency is they do follow a process and your end result may be the same. The issue is how much detail do they need to reach that result. Different review engineers require different amounts of detail.

It's almost like they have a different comfort level in their determination that "This is OK." Some will come to that conclusion quicker with less information and some want more information and more detail. "What about this, what about this?" Ok, then we're at the same point. An [experienced permit writer] would have come to that conclusion sooner.

Complexity of rules and permit inconsistencies

Some applicants think that inconsistencies occur because Wisconsin's rules are too complex. They allow too many interpretations.

Part of the reason we don't have some of the consistency—part of the reason—just reading the rules—it's difficult. Specifically I was just reading NR 428 and we had three people in our group read 428 and we interpreted it three different ways. So if we're having that problem then certainly people in regional offices who are trying to evaluate compliance or permit requirements may be having the same issues.

Part of the problem is that the administrative code language is written very poorly. It's very arbitrary. It involves a great deal of opportunity for variations in interpretation. So you get a different interpretation from Rhinelander, from Green Bay, from Madison and whatnot.

I talked a little bit about the differences in the bureaus in the state DNR, and I think the complexity of the air rules really has something to do with that. The water people do not understand air rules. The air people barely understand the air rules. The consultants interpret air rules differently than regulators. Me, as a person, our plant looks at air rules, and I come up with a third opinion on things.

Staffing Issues

Applicants voiced a number of concerns about the staff assigned to air permits.

Applicants note that the permit writer they work with determines the quality of the experience they have. While applicants are generally positive about their permit writers they raise a number of issues related to their workload, training and management. It should be emphasized that applicants are rarely critical of the permit writers themselves. They tend to see them as solid professionals struggling to implement a balky regulatory regime.

Applicants focus on the following problem areas:

- Workload
- Lack of experience
- Lack of direct knowledge of the facility / industry being permitted
- Emphasis on imposing the regulations
- Management's not providing a process for conflict resolution

Workload

Some applicants think the DNR is slow to process permits because staff members are overworked.

I think this [ideal permit writer] exists at the DNR but I think he's so overloaded with work and facilities that he really can't do these very well. I think he has the ability to.

I recognize they are overworked. A lot of people I work with at the DNR—they got a lot going on so the last thing I want to do is be another headache.

We talk about workload and I have the impression that the permit writers are not sitting around twiddling their thumbs. How, within the department, do they determine what's the adequate number of staff? Some permit writers are in great demand for a given industry.

Also one problem we have, there is someone really good in the Department. He is very familiar with facilities [of a certain type] and the problem is that everyone needs his help. He's in such demand and he's the best one they have. You have to clone him.

Some applicants think there are enough staff members, but that staff is not focused on writing permits.

I think there is enough staff within the department. Is that staff adequately used? I don't think so.

Other states are doing it with the same number of employees. And they're doing a better job.

How do you define workload? It seems like I get an awful lot of, "I'm in training all week."

I get a lot of Voicemails where they are out all week, so I don't think they could be working on permits. It's other workload maybe.

Lack of Experience

Some applicants say the process is more difficult when working with inexperienced permit writers. Their lack of knowledge can stall the process.

It's assigned to a person and they get it. Then you have to go through five or six iterations with them on the same basic stuff you did with the guy before him because it's the first time he wrote a permit like that. Somebody different every time.

The person would say, "I've never done one of these before." Sorry about that. Here, I can put you in touch with someone who has. Why don't you talk to them?

The sticking point I've found was knowledge about the industry. I worked with three different permit writers and some of them just had no clue as to what was going on. It made it easier if somebody had worked on something so they had some background. Permit writers are not sufficiently creative or flexible.

There's no incentive. [Moderator: incentive?] For creative problem solving. They are definitely more in the regulatory mode. They've got the blinders on. They are not looking for solutions.

Site visits

Applicants generally agree that the permit writer should be familiar with the facility being permitted. It's helpful if the writer actually visits the plant.

Understand [the facility] not only from a business standpoint but your processes. Get them out from behind their desks to see how the real world is working.

Some of them are unwilling to come down. They don't want to step out of the office.

One of the things I like to do with these things is get the permit writer down to my plant and show him the process. Because so many times they are just in their office looking at the regulations, looking at the application, and writing out a permit for a process they don't understand. Except based on what you wrote in the application.

Management of staffers

A few applicants believe that permit writers have too much discretion in making decisions. They and their decisions may not be sufficiently reviewed or overseen by supervisors. After a writer makes a decision, the Department seems bound to back it up.

A couple of things that I see that's very different in other states: you don't receive letters from staff people in other states. You don't have an individual that has an opinion that then writes that letter and sends it out to [facility] without it coming through the chain up through the rest of the department. I think it relies far too heavily on an individual's opinion. Now once they write you this letter that says, you have to do this or that, then it's very awkward and hard for the department not to support the other person's position.

Loss of program focus

Some participants feel that the air program has misplaced its priorities. It is devoting undue time to regulatory initiatives when it should be concentrating on issuing permits.

I think the DNR had over-committed themselves. It seems like they could narrow their focus on what needs to happen. Reducing their goals and aspirations in other areas—then they can allocate more resources to the permitting area.

[Wisconsin is] coming up with new state only regulations: NR 400, air toxics stuff, pushing diesel regulations that are state only. Why are we putting all this effort and resources into state only regulations when what we really need no one is looking at? [Moderator: what need?] What we really need is people writing permits and getting them out promptly.

Greater resources are not going to be allocated to the air program. Let's not bite off more than what's already been bitten off as far as more things to review. They are looking at a huge expansion of NR445 and that's going to add time on for review of air permits as well.

Everybody's crying we can't do things faster. There's not enough money. Why are we spending so much money trying to develop 600 HAPS when the Feds have 180? Why are we trying to do programs that are so much better than other states, yet we're saying we don't have enough funding to operate? Why aren't we getting closer to the federal rules?

Section II: Process-specific Problems

These are specific problems applicants encounter during the permitting process.

Exemptions

Applicants sometimes cannot tell whether changes they propose to make at their plant require a construction permit. They may or may not be exempt. When they ask DNR representatives for an opinion they feel they don't always get a definitive answer. Some are frustrated that changes they deem minor require full-blown construction permits.

Forms

Once they enter the permitting process applicants may have a hard time determining which forms they must complete. More than fifty such forms are available on-line. Some applicants report problems downloading these forms.

Processing

Applicants often apply for expedited review but feel they don't always get it. When they submit their application the department does not acknowledge its receipt or keep them informed of its progress through the system. Applicants are particularly frustrated when permit writers are slow to categorize the application "complete." Others feel that some permit writers wait until an urgently needed application is almost complete and then propose onerous conditions. The issuance of the permit is slowed when applicants fail to accede to these conditions. Applicants note that there are no effective mechanisms for resolving such disputes and many are afraid to antagonize the person writing their permit no matter what the circumstance.

Final permit

The final permit that emerges from this process often contains numerous errors. Some find it hard to understand, saying it's vague and subject to too many interpretations.

Exemptions

Applicants often can't tell if they need a permit.

Applicants sometimes have a hard time determining whether or not they need a permit. The rules are complex and they feel they don't get clear guidance from the staff. Naturally, they would like to avoid the permitting process if possible.

Need for a permit

Well for us, the first milestone is trying to find a way not to go through the process. It's determining whether or not you can get out under the exclusion or an exemption or would you be too small to have to do it. That's a complex process.

There's an awful lot of spots to look through in the regulations and it's not user friendly to try and find out where you fall.

The complications associated with our permit were a function of disagreements between the regional and central office relative to whether or not we needed a permit in the 1st place. [A debate of several months delayed action.] Once we identified that permit had to be done the process went forward fairly quickly.

Some are frustrated when seemingly minor changes require a new permit.

My other frustration is simple modification of [materials]. Not even increasing emissions. Simply swapping materials. And still staying under the limit. Changes in usages of materials. Still defined as a major modification.

Complex rules

The complexity of the rules can make determinations difficult, even for DNR staffers.

Determining applicability is very difficult. That's why we have our jobs and why there are lawyers and consultants in the air field.

There are grey areas in the rule too where you can call two different permit people and get two different answers on whether or not you need a permit.

Several applicants are frustrated that the DNR leaves complex determinations up to them.

I'll [call] the DNR sometimes and tell them what I'm going to do and get their opinion. A lot of times they don't give you a straight answer. ...
They'll recite the regulations. You can tell them your opinion and they'll say "OK, that's your opinion. It's up to you what you want to do with it."

I think they're afraid they're going to say something that will come back to them rather than giving the best answer. I find that all the time with agency people: you never get a firm answer.

I feel [that our modification] fits the exemption but I don't know that for sure. Nobody is willing to commit over there that this qualifies for the exemption.

It's not always obvious to the permit writers that the firm's actions require a construction permit. This applicant reports seeing disagreements within the DNR over the need for a permit.

I mean the complications associated with ours ... really were a function of disagreements between the regional office and the central office, relative to whether or not we even needed a permit in the first place.

Application Forms

Applicants don't know which forms to complete.

When applicants have a hard time determining which forms they must complete, they feel the Department gives them inadequate guidance. This is particularly vexing for those who are new to the process or who don't have the advice of a consultant.

There are probably 50 different forms and you don't need to fill them all out. It depends on what you're getting permitted. Sometimes it's hard to ask them which forms to use.

I find it difficult sometimes to decide what form to use and it just seems like there should be a better way.

But it's kind of like doing taxes, you need to know which form you need for what your tax status is. Once you know that, it's not a big deal. Getting to that point is a big deal.

I was sent some forms. I think they were on a diskette. It had like 198 forms you needed to fill in and that was rather daunting. I really only needed five of those forms to be filled in. The forms can be hard to download.

I haven't been able to get them off line properly. They're too complicated to unzip and all that other stuff.

Even an experienced, highly skilled applicant suggested that forms can be difficult.

I know the forms. Sometimes the review engineers will disagree with your interpretation of which forms that need to be filled out for which processes. At which point it doesn't pay to argue with them. Just do what they ask.

Applicants with more experience report that they've improved with practice. Only by engaging in the process have they learned which forms apply to their operations.

I've been through the process. This is my fifth or sixth time. So I don't have any problem with it. But I do remember from the first time. It is confusing: what forms go where and which ones you do need.

Expedited Permits

Applicants feel pressure to apply for expedited permits.

Applicants are uniformly anxious to get their permit and begin construction, so many of them apply for expedited permits. They fear that unless they pay for an expedited permit their application will languish indefinitely at the bottom of a pile. For some this feels like extortion. Others wonder if their application was in fact 'expedited'.

Prompt processing

Many applicants feel they need speedy processing, so they apply for an expedited permit.

I always check expedited. If it's not expedited it's going to sit somewhere for two years. Nobody looking at it—not being picked up. Definitely.

One of the problems is that everybody who puts a permit in expedites it. You don't have time to wait. So it's always a hurry.

You do it because you have to. Or else they won't look at it at all.

We wanted to install the equipment during our shutdown so we had no choice but to file for an expedited permit. We're not too happy about it. We had everything lined up—contractors and everything else—so we had to go for it.

Several applicants believe that even the additional cost of an expedited permit does not result in rapid processing.

You put in for the expedited permit because if you don't, it will take over a year and if you do there is no quarantee that it will go faster.

I just tell the clients it's not worth their money.

Permit Tracking

The DNR does not adequately inform applicants of their permit status.

Applicants describe the DNR's processing system as a "black hole." The Department does not tell them that it received their application. Nor does it inform them of its progress through the system. Applicants have no way of knowing if their permit is on track or if it has gone astray. They feel compelled to contact the Department frequently to monitor the status of their permit. As noted earlier, they complain that reviewers do not return their calls or answer their emails.

Acknowledge receipt

I've found that there's no communication once it's in the DNR. I don't even get an email that says, "We've got it and here's the timeline. You've got two months to review."

Applications get lost

It would be nice to know that it was received by the Department. I actually sent in an application and followed up three weeks later and got the response, "We haven't seen it."

Hand delivery

Several applicants have their applications delivered by hand or send them via certified mail. This way, they feel sure the DNR has them and they can inquire immediately who will process them.

I never send them. Ever. I hand deliver them to the person. Always. I learned that over the years.

What we do is we give a call before I even send in the application and see where our local DNR has time and resources to review it at the local office.

Because we sent it certified and then we call and see if it's there. They don't tell you if they got it and that would be nice if they'd call up and say, "We received your permit—it's been assigned to so and so."

Tracking the permit

Applicants talk about how the DNR does not adequately communicate the status of their applications.

It goes into a black hole. Never to be heard from again.

[After the application is sent in], then we hear from somebody. And that can take anywhere from two to three weeks to maybe a couple of months. And they'll tell us our application is incomplete.

Persistent follow-up

Facilities find themselves contacting the DNR regularly to discover the status of their permit and to gently push it along.

You have to gently push the process along and be the squeaky wheel, so to speak.

I was professionally persistent.

You've got to be on the phone making sure that people are working on your permit. "When are you going to get back to us?" It's push, push, push. If you don't do it, I'm not sure it would get done. Make a lot of noise.

Some applicants wish the DNR would do a better job of keeping them informed.

It would be really nice if we could get feedback from the DNR on where things are at.

Participants believe delays occur because their applications simply sit on desks.

Seems like most of [the delay occurs between] the time that you submit it to the time somebody looks at it.

So it did go down to Madison and I think they did it very efficiently also. I think they did it within a day of when they picked it up. The problem is they didn't pick it up for about eight weeks.

Completeness Determinations

Participants are frustrated by reviewers' reluctance to certify their applications "complete."

The issue of completeness is one of the recurring themes in these conversations. Applicants seem uniformly frustrated by reviewers' reluctance to classify their application as complete. Statutory processing times are not activated until the reviewer decides that the application is complete.

Formal notification

Applicants are often not notified that their application is complete.

The problem is we never hear whether it's complete or not.

I don't know that we've ever gotten anything that says it was complete. You kind of assume it was after a while. Because I'd be calling, talking to them, seeing how things were going. Sometimes they come back and ask for more information.

They'll never send you a letter indicating that it's complete. I've never seen one.

Requests for more information

Participants say their applications have never been certified complete on the first try. They consider extensive forms more predictably complete than shorter ones. Yet even with extensive forms, they say the DNR asks for more information.

We supply what we think the agency wants or the permit writer needs, and invariably there's some more questions about what is this or what did you mean to do here or whatever. And the next permit we try to incorporate what we learned from those questions, and then it's some other question. It's like you're always trying to shoot at moving targets.

We had submitted the BACT analyses and all that sort of thing, but it didn't meet the criteria or whatever that the agency required. So we went back and forth with numerous questions and responses and it took a lot of time to satisfy what they felt was a complete application.

Permit writers' requests for information sometimes strike the applicant as research rather than permit writing.

I heard one of my colleagues describe it as certain permit review engineers want to make it a research project as opposed to process the application.

Some also voiced concern about BACT and LACT determinations. They see them as further stretching out the permitting process.

We run into the same issues with BACT analysis. With the LACT analyses, many times you need to go to the vendor because the Department is requesting more specific information that we don't have. The vendor knows you're not going to buy this so their turnaround is very slow. It's painful to go back and ask them so many questions. It drags out and slows down the process and usually the end result is NOT that much different from what we initially proposed.

Stopping the review clock

Some participants suspect that permit reviewers postpone their completeness determinations in order to delay the start of the permit clock.

My experience is that the permit application will not be deemed complete until they are ready to issue the public notice. In my opinion they have the self-interest in doing that. Because the way the statutory requirements are written, after so many days of deeming the application complete, they have to issue the final complete. Their clock doesn't start to count [until application complete].

Information requests

Likewise, some think permit writers request additional information as a way of stalling the application process. Consider the following exchange:

At one point we'd gotten an incomplete notice because we didn't give them every MSDS. What in the world would they be doing with all those MSDS's?

I would take that as "Oh, they just want to postpone finishing the permit so they sent me an incomplete."

It feels sometimes like the incompleteness letter is a means to stage the work that they do and to stop the review clock.

Right. "While I'm working on this I'll send them an incomplete letter and then I can set that one aside until I get a response."

Stalled processing extracts concessions

Some applicants experience these delays as means to pressure them into accepting onerous permit conditions. Unless they agree to these conditions, they feel, the issuance of their permit will be further delayed.

They wait until the very end. I'm under a time constraint. I feel like I'm held hostage. Now we get down to the last contentious permit requirements. (...) Even if there's no technical basis I have to agree to something that's being forced on me and they try to extract something extra from me.

You feel like you're being blackmailed.

At the 11th hour and 59th minute it's there and you're feeling pressure from all sides and you may take a permit condition that's not in your best interest. Now you got this condition out there and when you get your next permit it sets a precedent.

At the last minute they come in and say 'here are your permit requirements'. If you can't get a consensus on that you DO have to commit to things that you don't want and it's a precedent for the next permit.

No mechanism to resolve disagreements

A number of applicants noted that when they disagree with the permit writer there is no mechanism to resolve the disagreement. Some are reluctant to press their case for fear of "payback;" i.e., the permit writer may find ways to punish them.

What do we do if we run into a disagreement? There's a disagreement between us and the agency. What recourse do we have for resolving that? Do we move up the hierarchy of the DNR? All of that isn't very clear to us.

When you get to an impasse, the more you push the further down the pile you go. Your permit is delayed or other repercussions. You can't document that but I mean the more you push the worse it gets.

Inefficient Processing

Inefficiency slows the issuance of permits.

Applicants suspect the Agency is inefficient in its review of permits.

They point to the following:

- Applications that can be submitted only on paper, not on-line [by e-mail]. Applicants believe permit writers re-type them.
- Laborious rechecking and recalculating of data
- Reinventing the wheel: writing wholly new permits when existing permits might better be used as templates

Clerical procedures

Some think that agency personnel re-type or otherwise re-enter their applications

Lots of permit writers are agreeable to letting your submit your spreadsheet. When they get it they're retyping it in again. Just take my spreadsheet. I'll e-mail it to you.

The current system does not lend itself to efficiency. More paperwork that needs to be done.

We've got some DNR forms we've converted into Excel. Once it goes to the DNR I don't know how they deal with that. I have the impression they're just taking it and manually retyping into whatever the format is for their permit.

Undue scrutiny of data

Applicants also say that processing is drawn out because DNR staffers examine every number on an application, even when the application replicates an earlier one. Others say the permit they receive is very similar to their application, yet the application took a long time to review

It seems like they're reinventing the wheel.

I think a lot of it is rechecking instead of trusting that it's been done right. I think they go through every permit and redo the whole thing.

A lot of the permits that are submitted, there's not a lot of rewriting to do on some of those permits. Ours went in that time, look at the initial document that went in, and what came back. It wasn't changed much ... So why did it take that long?

Modeling

Applicants express several opinions about modeling.

Participants differ in their opinions about the role modeling plays in the issuance of their permits, though very few feel strongly about it. For some it simply isn't a concern; for some it's just another delay. A few participants feel that modeling has had an effect, namely the imposition of more stringent emissions limits upon their permits. Some want modeling in the hands of their consultants, while others are content to leave it with the DNR.

No difficulties

Some participants make no complaint about the Agency's modeling.

We had real good results with modeling.

I don't have the capabilities to do modeling so the DNR really has to do it. I know you guys have tremendous capabilities.

Our consultant ran the model and the DNR ran it. I don't think we had any major problems with that.

He kept using it as an excuse. I sent it to modeling.' And I know in most cases modeling seems to be pretty efficient. They turn it around. So when he was telling me I'm waiting for it to come back from modeling' I knew it wasn't true.

Difficulties

There are a few applicants for whom modeling is one more stumbling block to getting their permit.

Seems like it always raised more questions for the person writing the permit. Can you adjust this? Can we put a limit on you somewhere else? It seems like that was always a stumbling block.

There was a period of time when it was hung up with the modeling guys. There's usually one person that does it. They were tied up on other things or on vacation.

The biggest black hole I have at DNR is, I'll call him [permit writer] up and make sure he knows the timing and what has to be done on his end and the biggest black hole is he says "It's in modeling." What does that mean? (Mad)

Other applicants believe their permits have been delayed by modeling and by disputes over how it's been conducted. Their experiences include the following:

- Application of the wrong background data
- Incorrect (actual, cartographic) placement of the plant being modeled
- Use of unique modeling protocols

Sometimes they do it wrong. We've done the modeling based on information we've submitted and, however that process works, they've taken the modeling and regrouped the sources and get a different result than we do. Now we're back to explain your logic for why you did it.

When we run the model for some pollutants we can make it work. Whose data do you use for meteorological data (location a) or (location b)?

Confusion over appropriate modeling procedures causes some problems.

We do everything according to EPA's procedures and it's not the way the Department does the modeling anymore. So it causes a two month delay in the process just to redo the modeling to get it in the form the Department does right now. Then the Department has to redo the whole thing to verify our results. Basically they come to the same results.

The Agency may provide firms with correct information for modeling.

The biggest problem with the modeling is that only DNR has all the other inputs. So you go to the DNR and try to get emission inventories from the other facilities and they'll give you information and sometimes that information is right and sometimes it's not right. That's a frustration.

Draft Permits

Applicants are disconcerted by errors in the draft permits.

Draft permits are exactly that: drafts. Despite the preliminary nature of these permits, applicants are distressed when they find mistakes or when the writer inserts conditions without first discussing them with the applicant.

Errors in the draft permits

Many applicants say that their draft permits include mistakes of some kind. Most of these were typos and cut-and-paste errors.

When we got the draft, [the products manufactured were listed as something different]. And we're located somewhere else in [city]. So that put a red flag up. Our consultant had to edit the permit for the writer and then we had to wait for his response. Then it came back another time and it was still messed up. It took three times until we were at the right facility and making the right stuff.

There were just mistakes based on information we submitted but somehow when they took that information from the application and put it back in the permit it was just wrong.

Full of typos—pasted on the wrong page.

Public Comment

The public comment period rarely elicits comments.

Most participants receive no public comment on their construction permits. This leads them to conclude that the comment period could be truncated.

No comments

I have a client in a neighborhood where nobody likes them and they never get any public comments on their permits.

If time isn't a critical issue to a number of my clients they'll ask for a public hearing and then they'll be the only ones to show up. Otherwise it could delay 60 days or whatever.

There is quite a bit of time taken up by the public hearing thing. I've never done any yet where anyone has made a comment.

All the other construction permits we haven't really gotten comments and no one has shown up.

Some applicants say that their draft will move to public comment more quickly if they post the notice themselves instead of waiting for the DNR to do it.

Now, if you want it done quickly, you publish the notice in the local newspaper, not the agency.

The Final Permit

The final permit may be hard to read and may contain burdensome requirements.

The remarks most commonly made about the construction permit itself involve the record-keeping requirements. Applicants feel the requirements do not make sense and have little or nothing to do with environmental protection. Some applicants complain that the permit is hard to read.

Record-keeping

Record-keeping requirements are regarded as burdensome and pointless. They soak up a lot of staff time with no apparent benefit to the environment. Applicants often say they don't understand the increased monitoring and record-keeping required by their permits.

We've spent millions of dollars to put in new equipment that operates much more efficiently than it used to. It doesn't take much rocket science to know your emissions are going to be down. Do you have to keep track of that every 10 seconds or every hour of every day for the rest of the operating life of the equipment?

I was going to say record keeping, it's such a small little word, but it is a huge responsibility that I didn't understand.

Record keeping is the biggest source of contention in the regulated community. The amount of record keeping. When you've got compliance inspectors requiring records just based on their level of authority and not specifically backed up by the rules. That's a problem.

Some applicants see no connection between increased record-keeping and better environmental protection.

You know, everything I do from an environmental standpoint is all geared toward reporting. All I'm doing is reporting data, reams and reams of data which I don't think anybody is using ... I can't think of anything that has made an environmental improvement.

Understanding the permit

Some applicants say it's hard to understand the final permit. It allows a variety of interpretations because it is so complex.

It takes a lawyer to understand final permit.

I think after we get an opportunity to go through the draft and write it so that it is comprehensive and understandable to us—it takes us rewriting it to make it a good document. When it's first thrown together it's very confusing.

Complexity allows a variety of interpretation

My bigger problem is reading the permit language and getting the same interpretation from two reasonable people. When you have the final permit—what does this really require them to do? One person can read it one way and another person can read the same words and come up with a different interpretation.

Section III: Suggested Changes

The purpose of these groups was to identify problems, not to solve them. However, at the end of most of the discussions, participants were asked "what one change" they would recommend overall to the Air Permit Program. Their answers fall into three categories:

- Simplify the rules
- Make the processing of permits more efficient
- Improve the internal operation of the Program

Rule Changes

Applicants believe the rules governing New Source Review should be simplified. Simpler rules will streamline the entire process. Wisconsin should allow applicants to begin some types of construction before they receive the final permit, and in general ought to hew to federal standards.

Processing Changes

Applicants believe the Air Program should tell them when it gets their application. They also believe they should be regularly informed of its progress through the system. Like the rules, application forms should be simplified and electronic formats developed.

Program Changes

The Air program should devote more attention to writing permits. Ambitious plans for new regulations should be shelved. The program should develop performance standards and hold itself accountable. Staffers need more training and better supervision.

Regulatory Changes

Applicants suggest the simplification of program rules.

Applicants believe the rules should change. Wisconsin should simplify its regulatory framework. Simpler rules would produce simpler permits. Specific suggestions for change include the following:

- Simplify the rules
- Rely on federal standards
- Allow applicants to commence construction in advance of a permit
- **■** Eliminate NR445
- Shorten the period for public comment
- Establish facility-wide caps on emissions

Simplify the rules

If the rules were simplified then permits would be less complex.

I don't think you can much accomplished without changing what the rules say right now. I don't put all the baggage on the DNR staff for the fact that the system isn't working very well. A lot of it is years and years of rules and how they are and how they are implemented. There are areas where you can work on streamlining. But the big issue is the rules themselves. (....) It really is broken.

If you could simplify the NR 400's, simplify some of that, that's going to cascade to where I can now get simpler permits. The statutes aren't that complicated. But the regulations, the rule making, can make it very complicated.

Establish facility-wide caps on emissions

Applicants want to move from the micro-management of individual processes and pieces of equipment to plant-wide limits on emissions.

Give me a permit that says "put anything you want in there and stay under 50 tons."

I'd do the facility wide cap thing. Allow people to take a limit in the operating permit and let them put in whatever they want as long as they stay under their cap. Take a facility wide monthly limit instead of all these little, detailed daily limits for processes.

I think that they can drastically curtail what they're looking at as LACT requirements. Being process specific and that kind of thing. Go with plant wide limits and have everybody work within their facility to make improvements rather than be process specific.

Shorten the public comment period

There's no reason the public comment period can't be shortened. To save a couple of weeks on small projects.

Rely on federal regulations and standards

Defer to federal rules which are already in place.

Other states do already.

Adopt the federal new source rules as they are written. Wisconsin is part of the lawsuit against all the reforms.

Allow applicants to start building at their own risk.

Actually being allowed to begin construction while the permit application is still pending. Because the construction season is pretty short in Wisconsin. You can't do the foundation in December or January.

I think if the company is in good standing, they don't have an NOV, then I think they ought to be able to start at their own risk. I think it would be very helpful if you could start on the construction phases of a project before the permit is issued.

The definition of when construction starts is far too strict.

Eliminate NR 445

If you eliminated NR 445—that streamlines the process.

Just get rid of NR445. Simplifies the analysis up front.

Permits

Integrate operating and construction permits

We have a lot of problems with consistency between our operating and construction permits. The language will be different.

Curtail excessive monitoring and reporting requirements

More reasonable record keeping. Certainly records are going to be important but there needs to be a link to why the requirement of a record is going to be important to the protection of the environment.

NOTE: Cooperative agreements in Wisconsin seem to reduce recordkeeping requirements, allow greater flexibility to the applicant, and speed the issuance of permits.

Change the Processing of Permits

Applicants believe the Air program should change the way it processes their permits.

The Air program could make immediate improvements by changing the way it processes permit applications. Applicants believe they should be notified when the Department receives their permit. They also think they should be told when it will be processed and how it is progressing through the review system.

Specific suggestions for changes include the following:

- Provide more guidance in areas such as BACT and emissions modeling
- Provide standard electronic formats for submittals
- Simplify application forms
- Provide clear guidance as to where permits should be submitted
- Acknowledge that permits have been received
- Provide on-going information on the progress of the permit

Provide guidance on modeling

The Department needs to get more written guidance and policy interpretations [on modeling] so we can look at them.

I think the Department needs to get policy, memorandum, guidance documents out there on the internet.

Submittals

Provide standard electronic formats such as Word or Excel

[In Michigan], we'll submit information on their permit applications and their permit applications are in an electronic format—which are either Word or Excel—which is convenient for us.

It would be nice if they came up with a complete electronic package to handle every piece of the process. If they could come up with some kind of electronic streamlining I think that would help a lot of people.

Simplify submittal forms—possibly using Federal forms as models.

The federal forms are a real good study in how a package can be streamlined. Just the bare bones data that's need to write the permit. They don't care about the manufacturer's model numbers and real detailed stuff.

The forms don't necessarily ask for the information that's needed. They're just too complex. I think the whole process could be simplified.

Provide clear guidance: where should firms submit their applications and to whom?

Clarify who the permit application goes to. Who you should mail it to.

Tracking

Inform applicants as to the on-going status of their application.

One other think I'd like to mention about the Black Hole. It would really be nice if we could get feedback from the DNR on where things are at. To get feedback from them would be very helpful.

Feedback through the process. Know your permit status. Did they look at it; did they not look at it?

On the internet maybe they could have a permit application page where it shows where you are on a rank or what the timeline is. Date it arrived. Who to contact.

Processing

Tell people when their permit will be processed.

If you send your permit in you're scheduled. They should call you and give you a date. "OK, your permit will be worked on during this week." Then you don't have to call. You're not sitting there wondering what's going on? Have they looked at it?

Information

Post all permits on the web grouped by SIC code

It would be really good information for the Web site to have the permits that are out there. In PDF format. For comparison sake if nothing else. If I could have easy access to that it would help a lot.

Identify industry experts

The DNR needs to post a list of the experts so if you had something on combustion, who do you talk to, or if you had printing.